WHAT IS CLAIMED IS:

1. A method for producing a light emitting diode, which has a plated substrate with a mirror, comprising steps of:

a) providing a substrate with an LED epitaxial structure including a second cladding layer, an active layer, a first cladding layer, a window and a metal contact layer sequentially formed on said substrate;

b) etching a part of said LED epitaxial structure to expose said second cladding layer;

c) forming a first electrode and a second electrode respectively on said metal contact layer and said exposed second cladding layer, and heating both said electrodes by rapid thermal annealing;

d) bonding a temporary substrate to said LED epitaxial structure and said first electrode;

e) removing said substrate provided in step a);

f) forming a mirror beneath said LED epitaxial structure;

g) plating a permanent substrate beneath said mirror; and

h) removing said temporary substrate.

2. The method as claimed in claim 1, wherein said substrate provided in step a) is a GaAs substrate, a sapphire substrate or an InP substrate.

3. The method as claimed in claim 1, wherein said LED epitaxial structure is made from a material selected from the group consisting of $Ga_xAl_yIn_{1-x-y}N$, $(Al_xGa_{1-x})_yIn_{1-y}P$, $In_xGa_{1-x}As$, ZnS_xSe_{1-x}; wherein $0\leq x\leq 1$, $0\leq y\leq 1$.

4. The method as claimed in claim 1, wherein said metal contact layer is partially etched to retain a portion beneath said first electrode.

5. The method as claimed in claim 1 further depositing a transparent conductive film between said first electrode and said metal contact layer.

6. The method as claimed in claim 1, wherein said temporary substrate is a glass substrate.

7. The method as claimed in claim 1, wherein said temporary substrate is bonded to said LED epitaxial structure with epoxy or wax.

8. The method as claimed in claim 1, wherein said mirror is a metal capable of forming high bandgap with said LED epitaxial structure.

9. The method as claimed in claim 8, wherein said mirror is made from a material selected from the group consisting of Ag, Pt, Pd, Au, Au/Zn, Au/Be, Au/Ge, Au/Ge/Ni, In, Sn, Al, Zn, Ge and Ni, or mixtures thereof.

10. The method as claimed in claim 1, wherein said mirror is made from a composite of a metal with a low refractivity and an insulating layer with a high refractivity, and said insulating layer is adjacent to said LED epitaxial structure.

11. The method as claimed in claim 10, wherein said composite is selected from the group consisting of Al/Al_2O_3, Al/SiO_2, Al/MgF_2, Pt/Al_2O_3, Pt/SiO_2, Pt/MgF_2, Al/Al_2O_3, Al/SiO_2, Al/MgF_2, Au/Al_2O_3, Au/SiO_2, Au/MgF_2, Ag/Al_2O_3, Ag/SiO_2 and Ag/MgF_2.

12. The method as claimed in claim 1, wherein said permanent substrate is plated beneath said mirror other than predetermined saw streets.

13. A light emitting diode having a plated substrate with a mirror, comprising:

a permanent metal substrate;

a mirror formed on said permanent metal substrate;

an LED epitaxial structure formed on said mirror, and sequentially comprising a second cladding layer, an active layer, a first cladding layer, a window and a metal contact layer, wherein said second cladding layer is partially exposed;

a first electrode formed on said metal contact layer; and

a second electrode formed on said exposed second cladding layer.

14. The light emitting diode as claimed in claim 13, wherein said LED epitaxial structure is made from a material selected from the group consisting of $Ga_xAl_yIn_{1-x-y}N$, $(Al_xGa_{1-x})_yIn_{1-y}P$, $In_xGa_{1-x}As$, ZnS_xSe_{1-x}; wherein $0 \leq x \leq 1$, $0 \leq y \leq 1$.

15. The light emitting diode as claimed in claim 13 further comprising a transparent conductive film between said first electrode and said metal contact layer.

16. The light emitting diode as claimed in claim 13, wherein said mirror is a metal capable of forming high bandgap with said LED epitaxial structure .

17. The light emitting diode as claimed in claim 16, wherein said is made from a material selected from the group consisting of Ag, Pt, Pd, Au, Au/Zn, Au/Be, Au/Ge, Au/Ge/Ni, In, Sn, Al, Zn, Ge and Ni, or mixtures thereof.

18. The light emitting diode as claimed in claim 13, wherein said mirror is made from a composite of a metal with a low refractivity and an insulating layer with a high refractivity, and said insulating layer is adjacent to said LED epitaxial structure.

19. The light emitting diode as claimed in claim 18, wherein said composite is selected from the group consisting of Al/Al_2O_3, Al/SiO_2, Al/MgF_2, Pt/Al_2O_3, Pt/SiO_2, Pt/MgF_2, Al/Al_2O_3, Al/SiO_2, Al/MgF_2, Au/Al_2O_3, Au/SiO_2, Au/MgF_2, Ag/Al_2O_3, Ag/SiO_2, Ag/MgF_2.